Briefing Note – 26 November 2014

Ebola Outbreak in West Africa

Update

	Not required	Low	Moderate	Significant	Urgent
Need for international assistance					X
	Insignificant	**Minor**	**Moderate**	**Significant**	**Major**
Expected impact					X

Crisis Overview

- The total cumulative number of reported cases across the region has reached 15,319, including 5,444 deaths (Liberia, Guinea, and Sierra Leone each reported over 17-18 November). The size of the 'hidden caseload' in Liberia and Sierra Leone is unprecedented, and these figures are believed to include only 50% of all cases in this rapidly spreading epidemic. The outbreak has already recorded more cases than all past Ebola epidemics combined
- The indirect consequences of the epidemic are extensive, and threaten the lives and livelihoods of more than 22 million people in Ebola-affected areas. The disruption of public and private services has created an emergency within the emergency.
- The unprecedented nature, scope, and complexity of this regional crisis have outstripped the health system's capacity for response and control.

Total recorded Ebola caseload and deaths per country as of 17-18 November

	Number of cases	Number of deaths
Liberia	7,082	2,963
Sierra Leone	6,190	1,267
Guinea	2,047	1,214
Total	**15,319**	**5,444**

Source: WHO 21/11/2014

- Reduced food trade and rising prices, as well as expected reductions in domestic harvests, are all undermining a fragile food security situation.
- Children are in urgent need of support, including family tracing, reunification and reintegration, alternative care, and psychosocial support.

Key Findings

Anticipated scope and scale

- Disease transmission continues. The end of the epidemic is not in sight. Actors in the field are not able to contain the epidemic and have extreme difficulty managing cases. Over 22 million people are living in areas with active EVD transmission.
- Health systems have collapsed and non-Ebola related mortality is increasing.
- The food security situation is worsening in the three affected countries.
- Children and survivors from Ebola are being rejected by their communities and are in need of protection.

Priorities for humanitarian intervention

- Massive assistance is urgently needed to address the humanitarian consequences of the epidemic, especially the disruption of health services and food security.
- Health workers are extremely vulnerable to the epidemic. 588 health workers have reportedly developed EVD, of whom 337 have died, as of 17 November.
- Pregnant women have been denied access to healthcare. Children affected by the Ebola crisis are in need of protection.

Humanitarian constraints and response gaps

- Weak national health systems with, proportionately, the lowest numbers of health workers in the world per population. Lack of training or experience and deaths of local health workers further diminish capacity.
- Fear and mistrust of authorities, and the national and international health system, are facilitating continued Ebola transmission.
- Restrictive confinement policies hamper access to healthcare, food, and markets. Border closures limit passage of humanitarian cargo and personnel.
- 52% of the USD 1.5 billion of Ebola Virus Outbreak Overview of Needs and Requirements has been received.
- Issues with medical evacuation for international staff have hampered international organisations' capacities to deploy staff.

Key Developments

Regional

Spread of the disease: 15,319 cases of Ebola and 5,444 deaths have been reported in Guinea, Liberia, and Sierra Leone (each country reported over 17-18 November) (WHO 21/11/2014). More deaths are not reported than are reported, so most agencies believe that these figures are a vast underestimate. A US official estimated there are 3,000 active cases of Ebola in West Africa, many of them in small clusters throughout the three countries (international media 13/11/2014). Eight cases of whom six have died have been reported in Mali as of 24 Novemeber (WHO, 24/11/2014).

Population affected: 22 million people live in areas affected by the Ebola outbreak. Health workers are extremely vulnerable to the epidemic as they are the most exposed. 588 health workers have been reported infected by EVD, of whom 337 have died, as of 17 November (WHO 21/11/2014).

Border restrictions: Most commercial airlines have suspended services to Guinea, Liberia, and Sierra Leone, further limiting the ability of humanitarian partners to move personnel and relief commodities (LogCluster 11/09/2014). Border crossings have been reported closed in Côte d'Ivoire and Guinea Bissau, and there are restrictions between Liberia, Guinea, and Sierra Leone (LogCluster 26/09/2014). Mauritanian controls on its border with Mali have led to a de facto closure, according to local sources (AFP, 25/10/2014). Senegal reopened its air and sea borders with the three most affected countries but the land border with Guinea remains closed (AFP 15/11/2014). Road access constraints and checkpoints are also delaying humanitarian access (LogCluster 19/10/2014).

Expected evolution: The CDC estimated that officially reported cases were, at the beginning of September, about 40% of the real burden in Liberia and Sierra Leone, indicating a possible total of 1.4 million cases in Sierra Leone and Liberia by late January, without scale-up of intervention (CDC 23/09/2014). See page 9. According to a US official, this worst-case scenario will not happen as the international community is mobilising resources, but a recent study indicates that the disease will continue to spread under the current level of intervention. The projections indicate 224 new cases every day in Liberia alone by December (Science, 30/10/2014). FEWSNET is using a planning figure of 200,000–250,000 cases for the three countries by 20 January 2015 (FEWSNET, 08/10/2014).

Liberia

Number of cases: As of 17 November, 7,082 cases had been reported, including 2,963 fatalities, since March (WHO 21/11/2014). The capacity to capture a true picture of the situation in Liberia is hampered by underreporting of cases (WHO, 29/10/2014; international media, 20/11/2014). The CDC estimates that only about 40% of Ebola cases are being reported in Liberia and Sierra Leone (AFP, 28/09/2014).

Spread of the disease: Weekly case numbers fell in Liberia from mid-September to the end of October and this decline has since stabilised. Efforts to control the disease remain critical, particularly in Montserrado district. Case incidence is declining in the neighbouring district of Marigibi, but high transmission persists. Other areas of high transmission include Bomi, Bong, Grand Bassa, Grand Cape Mount, Rivercess and Sinoe. Lofa, however, has experienced a consistent decline in new weekly cases, with no new reported cases between end October and 15 November (WHO, 19/11/2014). Concerns have been raised by humanitarian actors over violent outbreaks in remote communities in the area between Bong and Gbarpolu counties during the first half of November. Reaching these locations requires a 3–4 hour trek through deep forest and canoeing a river. Residents of the affected communities might flee the area in search of healthcare, contributing to the spread of the epidemic (UNMEER, 13/11/2014). All districts in Liberia have reported at least one case of EVD since the start of the outbreak.

Political context: Liberia's National Election Commission has announced plans to conduct the senatorial elections, postponed from 14 October due to the Ebola crisis, to 16 December (international media, 21/10/2014). Official campaign activities began on 20 November, but elections will not be held in parts of the country that are under quarantine. All public rallies, demonstrations, and gatherings in public areas have been prohibited (international media, 20/11/2014). On 13 October, the Liberian Parliament did not grant President Sirleaf emergency powers to suspend several provisions of the Constitution, including the right to free movement, free speech, and prohibitions on forced labour (UNMEER, 13/10/2014). National newspapers have been repeatedly obstructed since the start of the Ebola outbreak (Reporters Sans Frontières, 08/09/2014). On 30 September, the Ministry of Health and Social Welfare released an order requiring journalists wanting to visit an Ebola healthcare facility first to get written permission. The Ministry of Information has taken charge of the accreditation of journalists (international media, 06/10/2014).

Social tensions: On 10 November, some 600 EVD workers surrounded Liberia's Ministry of Health demanding payment of salaries and entitlements from early September (UNMEER, 13/11/2014).

Security context: On 12 November, Liberia urged the UN not to reduce its peacekeeping force in the country, warning that the epidemic is threatening peace and social cohesion (UNMEER, 13/11/2014). In the poorest parts of Monrovia and Nimba county, armed attacks and opportunistic crime have increased (DRC, 24/09/2014; UNMEER, 12/11/2014). Rising inter-ethnic tensions were observed in late August in Ganta, Nimba county (DRC 24/09/2014).

Movement restrictions: All borders have been closed, except major entry points: Roberts International Airport, James Spriggs Payne Airport, Foya Crossing, Bo Waterside Crossing, and Ganta Crossing. Travel in and out of quarantined areas is also limited (CDC 13/08/2014). Since 8-14 August, Lofa, Bong Bomi, Grand Cape Mount, Gbarpolu, Montserrado, Margibi, Grand Bassa and Grand Gedeh counties are under quarantine. In addition, Foya, Bopolu, Klay and Firestone districts have also been quarantined (IFRC, 12/11/2014). On 23 October, the President announced strict checks on Liberia's borders with Guinea and Sierra Leone (AFP, 23/10/2014). On 13 November, the Liberian President lifted the state of emergency and reduced the curfew, imposed from 20 August, to start at midnight (government, 13/11/2014).

Sierra Leone

Number of cases: As of 18 November, 6,190 Ebola cases, including 1,267 deaths, have been reported in Sierra Leone (WHO 21/11/2014). Reliable data collection remains a major challenge, and it is suspected that about 50% of cases are not being reported across the country (UNMEER, 02/11/2014). According to the mayor of Freetown, 2,200 corpses have been buried since the start of the disease, while officials reported over 1,200 deaths, reinforcing suspicion about underreporting Ebola cases and deaths (international media, 21/11/2014).

Spread of the disease: All districts have reported at least one probable or confirmed case. EVD transmission remains intense and widespread, with the country reporting 533 confirmed cases between 9 and 16 November, including 168 in Freetown. High levels of activity persist in the Western rural area and Port Loko. Transmission remains persistent in Bo, Koinadugu, Kono, Moyamba and Tonkolili. Koinadugu and Kambia are both emerging areas of concern. In contrast, Kailahun continue to experience sharp declines in incidence (WHO 19/11/2014). After three weeks without new infections, the district of Kenema, the epicentre of the outbreak, reported a death from Ebola on 21 November (AFP, 21/11/2014).

Social tensions: On 12 November, some 400 health workers at an Ebola treatment centre in Bandajuma, Bo district, began a sit-down strike over hazard payment (international media, 12/11/2014). On 25 November, burial workers in Kenema were on strike over non-payment of risk allowances and left at least 15 bodies abandonned at the public hospital (BBC, 25/11/2014).

Political context: On 4 November, a journalist in Freetown was arrested, under emergency measures introduced to fight the Ebola epidemic, after a guest on his radio show criticised the President's handling of the Ebola outbreak (Reuters, 04/11/2014).

Movement restrictions: On 24 September, Sierra Leone's President widened the quarantine, that only restricted movements in Kenema and Kailahun, to include the northern districts of Port Loko and Bombali, and Moyamba in the south. More than a third of Sierra Leone's 6.1 million population are unable to move freely (BBC, 25/09/2014; IFRC, 12/11/2014) In June, Sierra Leone closed its borders with Guinea and Liberia, and closed schools, cinemas, and nightclubs in border areas (OCHA 16/06/2014).

Guinea

Number of cases: As of 18 November, 2,047 Ebola cases, including 1,214 deaths, have been reported in Guinea since the start of the outbreak in December 2013 (WHO 21/11/2014).

Spread of the disease: Of a total of 34 districts in Guinea, ten remain unaffected by Ebola. Intense transmission persists, despite incidence stabilising or declining in some districts. There were 145 new confirmed cases reported from 3 to 9 November. The vast majority of new cases were reported from the southeast, near the border with Liberia, in Macenta, Kerouane and Nzerekore. Transmission in the districts of Coyah, Faranah and Siguiri persists, as well as the capital. Case incidence continues to decline in the outbreak's epicentre Gueckedou, which reported no new cases during the week to 16 November (WHO, 19/11/2014). However, MSF warns that the situation remains concerning. The transit facility in the district of Macenta was full and had to turn away patients on two separate occasions in the first half of November. The Ebola treatment centre in Gueckedou is also full and the situation in the eastern prefectures, where no facilities are available, is concerning (MSF, 21/11/2014).

Political context: Tensions between President Conde's ethnic group, the Malinke, who make up about 35% of the population, and the Peul ethnic group, about 40% of the population, have started to rise over the Ebola response (local media, 18/10/2014).

Movement restrictions: Macenta district has restricted entry and exit (IFRC, 12/11/2014). On 13 August, President Alpha Conde announced a series of measures including strict controls at border points, travel restrictions, and a ban on moving bodies from one town to another until the end of the epidemic (AFP 14/08/2014). Guinea closed its borders with Liberia, Sierra Leone and Guinea-Bissau on 9 August (international media 09/08/2014).

Crisis Impact

Regional

Health

With underresourced health systems diverted towards stopping the spread of Ebola, people are unable to access treatment for other diseases. Some hospitals have been entirely taken over by Ebola patients or are closed because they cannot treat Ebola patients safely (international media 25/09/2014). Only a minority of hospital specialists and technicians are still working, so most emergency responses cannot be carried out. UNICEF has warned of an overwhelming gap in the delivery of critical life-saving operations (international media 15/08/2014). Mortality rates from common diseases have been rising. Many people are reported to be unable or too afraid to seek medical care (UNMEER, 29/10/2014).

Maternal health: Women in the three most-affected countries are no longer giving birth in health facilities (UNMEER 03/11/2014). Up to 120,000 pregnant women could die of complications of pregnancy and childbirth if the required life-saving emergency care is not provided (Reuters, 16/10/2014). In addition, Ebola-infected pregnant women are often not permitted in Ebola treatment centres because of the high risk of contamination during delivery, likely resulting in a higher maternal death rate (UNFPA, international media 29/10/2014).

HIV: Around 217,000 people are estimated to live with HIV in Guinea, Liberia and Sierra Leone (international organisation 20/10/2014). 80% of people living with HIV in the three most Ebola affected countries have not been able to access treatment (UNDP 14/11/2014).

Malaria: The crisis could cause malaria deaths to quadruple to around 400,000 in the coming year, with patients too afraid of Ebola to come to clinics and access treatment (international media, 26/09/2014).

Lassa fever: The peak season for Lassa fever in West Africa has begun in November and every year it infects from 300,000 to 500,000 people, killing up to 20,000, in West Africa. Lassa fever can be cured but only when the disease has been laboratory confirmed but rapid tests are not widely available. Health workers are warning that they may not have the resources to deal with the disease if cases increase (BBC, 03/11/2014).

Food Security

About 1.7 million people are currently food insecure in the three countries, of whom 200,000 are food insecure because of Ebola (WFP, 05/11/2014).

Nutrition

According to the severity of the Ebola crisis, between 1.33 and 1.49 million people will be exposed to undernourishment in Liberia, between at least 2.13 and 2.41 million people in Guinea, and between 1.55 and 1.79 million people in Sierra Leone (ACF, 31/10/2014).

Displacement

EVD is a “driver of migration”. The fear of contracting the EVD and the lack of access to market or basic services have prompted many people to leave their homes and break quarantine. Some survivors had to relocate because they faced strong stigmatization after their return from hospital. Lack of health workers and Ebola treatment units in rural areas has led many to move to urban areas (IDMC 19/11/2014).

Protection

Quarantines imposed during the epidemic have frequently not been based on scientific evidence and too broad, disproportionately impacting people unable to evade restrictions, including the elderly, the poor, children, and people with chronic illness or disability (HRW 15/09/2014). Security forces are playing a central role and are charged with enforcing quarantines. Extortion and bribery have been reported place in places under quarantine (HRW 15/09/2014).

Children: At least 7,000 children in Guinea, Liberia, and Sierra Leone have lost one or both parents to Ebola since the start of the outbreak, and many are being rejected by their relatives for fear of infection (UNICEF, 10/11/2014).

Liberia

Health

Since the Ebola outbreak, the number of births attended by a health worker in Liberia has dropped from 52% to 38% (IRIN, 08/10/2014). Continuous strikes by health workers in more than half of operating health facilities in River Gee, Bomi, and Grand Cape Mount counties have considerably impaired already limited healthcare (UN, 19/10/2014). Shortages of common drugs due to lack of funds in the few remaining functional hospitals are further limiting services (international media, 26/10/2014). Before the Ebola outbreak, more than 70% of the 30,000 HIV patients in Liberia had access to treatment, but more than 60% of the facilities distributing antiretroviral medicines have since closed, according to the National AIDS Control Program (IRIN, 21/11/2014).

Food Security

Results of the mobile Vulnerability Analysis and Mapping (mVam) indicate that, as of October, all areas of Liberia are affected by food insecurity (WFP, 10/11/2014). About 549,000 people have been targeted for food assistance (WFP, 01/09/2014, 08/09/2014). In Lofa and Nimba counties, according to Mercy Corps' survey, 55% of households have experienced a reduction in income, 60% have higher expenses, and nearly half are eating fewer meals. Poor households are reportedly spending a larger proportion of their income on food (Mercy Corps 04/11/2014). Tight restrictions on cross-border trade and currency depreciation have resulted in sharp price increases for imported rice in the most-affected counties, including Bomi (+18%), Lofa (+12%), Maryland (+42%), and Nimba (+36%) (WFP 27/10/2014). Overall, around 60% of markets outside Monrovia have closed or scaled down (UNMEER, 13/10/2014). In Monrovia, prices of cassava and imported rice have increased by 30% (WFP, 17/10/2014).

Nutrition

According to the severity of the Ebola crisis, between at least 1.33 and 1.49 million people will be exposed to undernourishment (ACF, 31/10/2014).

Livelihoods

Household income has dropped by 35% in Liberia as of October, due to the consequences of the Ebola outbreak (UNDP, 14/11/2014). The self-employed have been hardest hit, due to the closure of markets. Before the crisis, over 30% of working household heads were self-employed, down to just above 10% nowadays. Only 50% of people working in the wage employment sector are still working, because of business or government office closures (World Bank, 19/11/2014).

Displacement

About 14% of households surveyed by the World Bank indicated having moved dwellings since the Ebola outbreak, but only 30% of those left the county in which they had been living (World Bank 19/11/2014).

Protection

Families of victims and survivors are experiencing physical and verbal abuse (DRC 24/09/2014). According to Amnesty International, homosexuals have been harassed and physically attacked by people blaming them for Ebola, after religious leaders said Ebola was a punishment from God for homosexuality (Reuters, 23/10/2014). On 10 November, four soldiers and their commanding officer were condemned for their actions during a protest in West Point over the Ebola quarantine in August. Two soldiers were found guilty of assault and arbitrary use of force, while two others were convicted of making false statements (international media, 10/11/2014). Liberia's Institute of Statistics estimates that over two million children are affected by EVD in Liberia, about 600,000 of whom are under five (UNICEF, 19/11/2014).

Sierra Leone

Health

The national public health system is overstretched and struggling to deliver non-EVD care (UNMEER, 16/11/2014). The number of women in Sierra Leone attending hospitals and health centres to give birth has dropped by 30% (IRIN, 08/10/2014). The Ministry of Health and Sanitation is planning a mass distribution of anti-malaria medicine, targeting 2.4 million people, in hotspot areas in the districts of Bombali, Kambia, Koinadugu, Moyamba, Port Loko, Tonkolili and in all of the Western Area in order to better identify Ebola cases, as the symptoms are similar (UNICEF, 12/11/2014).

Food Security

601,000 people were targeted by WFP for food assistance in September (OCHA, 16/09/2014). Thousands of people are being forced to violate Ebola quarantines to find food because deliveries are not reaching them (Associated Press, 04/11/2014). Quarantine measures, and a slowing of trade and agricultural activities, have caused inflation and a reduction in household income. Three-quarters of people surveyed by WFP have begun to reduce the number of daily meals and portion sizes (IRIN, 20/10/2014). According to a survey conducted by Deutsche Werlthungerhilfe (DWHH) in the badly affected Kenema and Kailahun districts, 97% of households' incomes had dropped between May and August (DWHH 06/10/2014).Price increases range from 13% for imported rice to over 40% for fish. Other commodities affected include cassava, groundnuts, and palm oil (FAO, 22/10/2014). DWHH expects serious food shortages to hit the country in early 2015 (DWHH 06/10/2014).

Nutrition

Depending on the level of the Ebola crisis, between at least 1.55 and 1.79 million people will be exposed to undernourishment (ACF, 31/10/2014).

Livelihoods

Household income has dropped by 29.7% in Sierra Leone as of October, due to the consequences of the Ebola outbreak (UNDP, 14/11/2014).

Education

Nearly two million children have not been attending school, as they remain closed. According to the Minister of Education, schools are not likely to reopen until March 2015 (UNICEF, 16/10/2014).

Displacement

According to DWHH's survey in Kailahun and Kenema, between May and August, many people have left their home communities because of Ebola: 15% of the surveyed households indicate that members of their family have migrated to other communities. In 50% of these cases, the epidemic was the main driver (DWHH 06/10/2014).

Protection

More than 3,400 children have been directly affected by the consequences of the Ebola epidemic. About 800 children have lost both parents to Ebola according to UNICEF (IRIN, 20/11/2014). With two million children not attending school, UNICEF warns of an increase in vulnerability, leading to a potential increase in child labour, and teen pregnancy (UNICEF, 16/10/2014). 96% of Ebola survivors in Sierra Leone have experienced some sort of discrimination, according to a UNICEF survey. More than three-quarters of respondents said they would not welcome an Ebola survivor back into their community (IRIN, 31/10/2014).

Guinea

Health

There is a major lack of medical and nursing staff, as aid workers and skilled employees have fled. Hospital visits have decreased by 53%, medical appointments by 59%, and vaccinations by 30% (UNMEER, 31/10/2014). Despite public health centres being open and operational, preliminary findings of Conakry's public health facilities assessment include a decrease of about 50% on access to health services, caused by fear of infection in health centres (ACAPS, 10/2014).

Malaria: 44% of Guineans, about five million people, are affected by malaria each year; the disease kills at least ten people every week. The recent gains in reducing malaria mortality by 50% over the past decade are been seriously theatened by the EVD outbreak (international media, 14/11/2014).

Food Security

In the Forest region, households are using severe coping strategies, such as reduction in the quality and frequency of meals, and substitution of rice consumption with cassava. In Conakry, a large proportion of households report incurring debt to purchase food. 57% of Guinean households were already at risk of food insecurity or food insecure before the EVD outbreak (WFP, 29/10/2014). Food prices have risen in Guinea–Senegal border areas: palm oil prices have increased by 40% and coffee prices have increased 50% in less than four weeks (WFP, 15/09/2014).

Nutrition

Depending on the severity of the Ebola crisis, between at least 2.13 and 2.41 million people will be exposed to undernourishment (ACF, 31/10/2014).

Livelihoods

UNDP estimates that household income has dropped by 12.7 % in Guinea as of October, due to the consequences of the Ebola outbreak (UNDP, 14/11/2014).

Displacement

On 11 November, several opposition deputies and human rights activists went on hunger strike in Womey, Nzerekore prefecture, demanding the safe return of around 6,000 people they say fled their homes after a group of EVD sensitisers was killed last September. The army was deployed in the town after the killings and was accused of human rights violations (UNMEER, 12/11/2014; international media, 11/11/2014). On 12 November, the Guinean Government announced the withdrawal of the troops (UNMEER, 14/11/2014).

Protection

About 2,700 orphans and widows in need of psychosocial support have been identified (UNICEF, 24/11/2014).

Aggravating Factors

Resistance to the Ebola response

Despite awareness campaigns, remote communities still show resistance to the Ebola response, hampering humanitarian access and efforts to contain the epidemic. There have been frequent spontaneous demonstrations protesting the presence of Ebola treatment units in neighbourhoods and bodies in the street (PI, 05/10/2014).

Liberia: On 23 October, humanitarian personnel were attacked in Boegeezay town in River Cess (Government, 24/10/2014). On 15 October, in Cinta township, Marbini county, residents chased an Ebola awareness team from the town (local media, 21/10/2014).

Sierra Leone: Fear and anger are taking a stronger hold among the population. Authorities imposed a curfew in the eastern district town of Koidu on 21 October after tensions between youth and police over a suspected case of Ebola degenerated into gunfire and rioting. Local sources reported at least two bodies with gunshot wounds, denied by the local police (Reuters, 21/10/2014). At least 200 ex-servicemen have been deployed to help enforce quarantine (international media, 21/10/2014). On 14 October, in Freetown, security forces clashed with residents protesting delays in removing the corpse of a suspected Ebola victim. Security forces fired tear gas and live rounds to disperse the crowd that had barricaded the street (Reuters, 14/10/2014).

Guinea: Tensions in Nzerekore and Siguiri between local population and health workers and contact tracers have been reported (UNMEER, 25/11/2014). On 8 November, in Coyah, several incidents of vandalism by the local population were reported after a visit by contact tracers. Sensitisation activities in this area have been suspended. In Wonkifong, Coyah prefecture, there were demonstrations against the establishment of

an EVD treatment centre. Security forces intervened (UNMEER, 05/11/2014). Protests took place in Kaloum, Conakry, over a suspected Ebola death; the vehicle of the burial team was vandalised and security forces intervened (UNMEER, 11/11/2014). On 4 November, in Dandayah, Forecariah prefecture, a team of contact tracers was chased away by residents (UNMEER, 04/11/2014). On 23 September, six Red Cross volunteers were attacked in Forecariah, while trying to collect the body of a person suspected to have died from Ebola (AFP, 25/09/2014).

Gaps and Response Capacities

Regional

Constraints

- There are large numbers of cases both in densely-populated areas and remote villages, making the outbreak particularly difficult to control.
- Poor road conditions and limited communication networks have posed challenges (UN, 26/10/2014). There have been significant delays in the discharging of airplanes, and damage to humanitarian cargo, due to lack of capacity at the airports (LogCluster 26/10/2014).

Gaps

The epidemic has increased exponentially because of the delay in response. Only 52% of the USD 988 million of Ebola Virus Outbreak Overview of Needs and Requirements has been received (UNMEER 25/11/2014). Lack of personal protective equipment (PPE) poses a major obstacle (UN, 19/10/2014). The 1,126 beds available are only 25% of what is needed. Only 62% of Ebola-affected districts across the three countries have access to lab services, according to WHO (IRIN 12/11/2014).

Response

WHO and UNMEER's aim is to isolate and treat 70% of suspected Ebola cases in West Africa and to safely bury 70% of the dead by 1 December. Médecins Sans Frontières (MSF) is the main clinical responder on the ground, with 3,340 staff working in eight treatment centres (MSF 07/11/2014). IFRC has deployed over 1,370 international staff to support authorities mainly in contact tracing, body management, burial and disinfection, and psychosocial support (IFRC 11/2014). More than 100 CDC staff have been deployed in Guinea, Sierra Leone, Liberia, Nigeria, and Senegal (CDC 12/09/2014). Cuba has sent 256 health workers, of whom 165 are in Sierra Leone. 300 more medical workers are expected (The Guardian 22/10/2014). The Logistics Cluster has established a logistics hub in Monrovia to manage and dispatch health relief commodities, and is transporting and storing medical items in Guinea, Liberia, and Sierra Leone (USAID 04/09/2014). The deployment of 3,000 US troops has been pledged to provide logistical and engineering support in Liberia and Senegal; on 10 November, around 2,200 US troops were on the ground (Reuters 12/11/2014). On 8 October, the UK announced that 750 troops will be deployed to West Africa (BBC 08/10/2014). More responses have been pledged but it remains to be seen when the aid will become operational.

Liberia

Constraints

The humanitarian response is being hampered by a shortage of funds for fuel, as well as by poor road conditions, which have worsened due to heavy rains. Lack of vehicles is also complicating the distribution of supplies and transportation of patients (UNMEER, 10/11/2014). The airport can only handle one aircraft at any given time. Delays in security clearance mean medical and other relief items are stored for a long time, slowing the response (LogCluster, 19/10/2014). Logistics problems continue to hamper the containment of the epidemic, including hospitals which still cannot separate Ebola patients from others, shortages of ambulances, vehicles for case investigations, and thermometers (international media, 20/11/2014).

Gaps

As of 10 October, around 80,000 body bags, 990,000 PPEs and 590,000 pairs of gloves were estimated to be needed (Government, 10/10/2014).

Response

As of 24 November, 104 humanitarian organisations are active in Liberia (OCHA, 24/11/2014).

Sierra Leone

Constraints

In Sierra Leone, delays in visas and security clearances for cargo and planes, as well as high customs fees, are hampering humanitarian access and supply distribution (international media, 06/10/2014).

Gaps

In Sierra Leone, at least 300,000 personal protective equipment (PPE) sets are needed (UNMEER, 16/11/2014).

Response

As of 25 November, 59 humanitarian organisations are active in Sierra Leone (OCHA, 25/11/2014).

Guinea

Constraints

Poor road infrastructure means many communities outside the capital are inaccessible (OCHA, 16/09/2014).

Response

As of 24 November, 32 humanitarian organisations are active in Guinea (OCHA, 24/11/2014). On 15 November, France announced it will coordinate Ebola containment efforts in Guinea, at the UN's request (AFP, 15/11/2014).

Information Gaps

- Regular information on the food security and nutrition situation in each district, in each country.
- Markets and prices analysis in the three countries.
- Information on the health system, non-related to the Ebola response.
- Information on people displaced due to the Ebola crisis and shelter.
- Education

Lessons Learned

Severe Acute Respiratory Syndrome (SARS) in China, 2002–2003

- The SARS epidemic exposed weaknesses in China's public health infrastructure, including inadequate state funding, lack of effective surveillance systems, and severe shortages in facilities and medical staff prepared for an epidemic infectious disease outbreak (NCBI 2003).
- The Chinese Government established a case reporting structure, strengthened its emergency response system, and provided funding for the prevention and control of SARS (NCBI 2003).
- At first, the response was slow and the Government did not seem to recognise the severity of the crisis, aggravating the situation. The SARS experience increased government officials and the public's recognition and understanding of the importance of infectious disease control and prevention in general (NCBI 2003).

Middle East Respiratory Syndrome (MERS) in Saudi Arabia, 2012

- The authorities set up a special structure to contain the spread of the disease. The Government developed an electronic system to improve reporting of new cases to the Ministry of Health, in order to ensure reliable information and timely reporting (IRIN 28/08/2014).
- Transparency and coordination, both at the global and national level, were the key to containing the epidemic (IRIN 28/08/2014).

Past EVD outbreak in Democratic Republic of Congo, 2003

- Humanitarian actors have to take into account the stigmatisation of frontline health workers. Rejection of health workers can hamper mobilisation and the containment of the outbreak. Some Red Cross volunteers who responded to the 2003 outbreak in DRC were still regarded as witch doctors three years later (France24 02/09/2014).

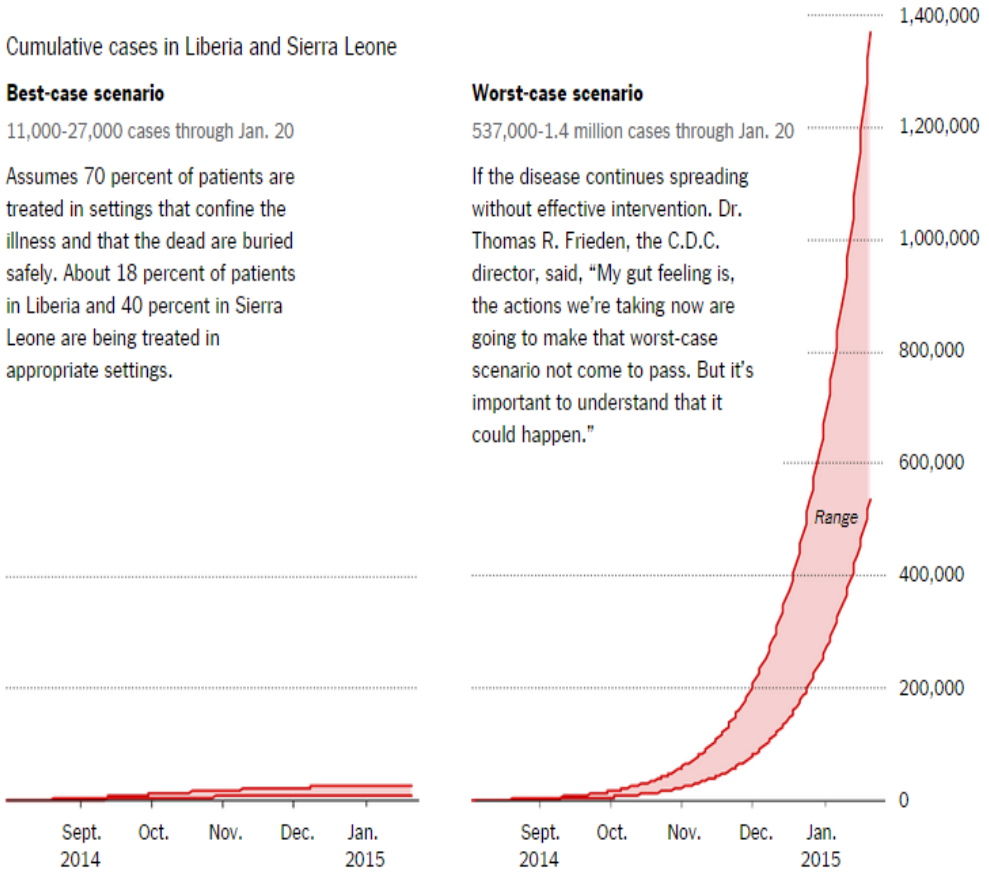
EVD outbreak, 2013–2014

- Classic "outbreak control" efforts are no longer sufficient for an epidemic of this size. A large-scale, coordinated, humanitarian, social, public health, and medical response is required, combining classic public health measures with safe and effective interventions, which include behavioural change and, where possible, vaccination (NEJM 23/09/2014).
- Certain conditions can transform what might have been a limited outbreak into a massive, nearly uncontrollable epidemic: changes in the interactions between humans and their environment, high population mobility, local customs that can exacerbate morbidity and mortality, spread of the disease in densely populated urban centres, lack of trust in authorities, dysfunctional and underresourced health systems, national and international indifference, and lack of effective, timely response (NEJM 23/09/2014).
- Key lessons and best practices have been identified by UNICEF in the containment and prevention of the spread of EVD in Nigeria. These include: decentralise the National Ebola Emergency Operations Centre, while simultaneously building the state's capacity to manage the outbreak; bring sectors together under one command structure to enable effective intersectoral coordination; centralise media messaging within a single official source to minimise rumours; and payment of incentives for health workers to encourage them to remain in EVD-affected areas (UNICEF 24/09/2014).

Annex 1. Expected Evolution: How Big Can the Outbreak become?

The Centers for Disease Control and Prevention said Tuesday that in a worst-case scenario, cases could reach 1.4 million in four months. The centers' model is based on data from August and includes cases in Liberia and Sierra Leone, but not Guinea (where counts have been unreliable).

Estimates are in line with those made by other groups like the World Health Organization, though the C.D.C. has projected further into the future and offered ranges that account for underreporting of cases.



Source: New York Times, CDC 22/09/2014

Annex 2. Ebola Virus Disease

What is Ebola? (WHO, 09/2014)

- Ebola virus disease (EVD), formerly known as Ebola haemorrhagic fever, is a severe, often fatal illness in humans.
- The average EVD case fatality rate is around 50%. Case fatality rates have varied from 25% to 90% in past outbreaks.
- The first EVD outbreaks occurred in remote villages in Central Africa, near tropical rainforests, but the most recent outbreak in West Africa has involved major urban as well as rural areas.
- Early supportive care with rehydration and symptomatic treatment improves survival. There is as yet no licensed treatment proven to neutralise the virus but a range of blood, immunological, and drug therapies are under development.
- There are currently no licensed Ebola vaccines but two candidates are undergoing evaluation.

Transmission of the Virus (WHO, 06/10/2014)

- The Ebola virus is transmitted among humans through close and direct physical contact with infected bodily fluids, the most infectious being blood, faeces, and vomit.
- The Ebola virus has also been detected in breast milk, urine, and semen. In a convalescent male, the virus can persist in semen for at least 70 days; one study suggests persistence for more than 90 days.
- Saliva and tears may also carry some risk. However, the studies implicating these additional bodily fluids were extremely limited in sample size and the science is inconclusive. In studies of saliva, the virus was found most frequently in patients at a severe stage of illness. The whole live virus has never been isolated from sweat.
- The Ebola virus can also be transmitted indirectly, by contact with previously contaminated surfaces and objects. The risk of transmission from these surfaces is low and can be reduced even further by appropriate cleaning and disinfection procedures.

  EVD is not an airborne infection. Airborne spread among humans implies inhalation of an infectious dose of virus from a suspended cloud of small dried droplets. Speculation that EVD might mutate into a form that could easily spread among humans through the air is speculation, unsubstantiated by any evidence.

Key Characteristics

General Indicators

Key Indicators	Guinea	Liberia	Sierra Leone
Total population	11.45 million (WB 2012)	4.19 million (WB 2012)	5.98 million (WB 2012)
Outbreak start date	February 2014	29 March 2014	26 May 2014
Case fatality rate (CFR) as of 26 August	430/647 (66.4%)	694/1378 (50.4%)	422/1026 (41.1%)
Age distribution	42.9% under the age of 14 (HEWS 25/09/2012)	43.49% under the age of 14 (HEWS 25/09/2012)	43% under the age of 14 (HEWS 25/09/2012).
Nutrition	35.8% of under-5s underweight, 16.3% stunting, 5.6% wasting (WHO 2012)	20.4% of under-5s underweight, 39.4% stunting, 7.8% wasting (WHO 2007)	21.1% of under-5s underweight, 44.9% stunting, 7.6% wasting (WHO 2010)

Health Indicators: Pre-crisis Situation

Key Indicators	Guinea	Liberia	Sierra Leone
Infant mortality rate (%)	65 (UNDP 2014)	56 (UNDP 2014)	117 (UNDP 2014)
U5MR	101 (World Bank 2012)	75 (UNDP 2014)	182 (UNDP 2014)
2014 HDI rank	179 (0.392) (UNDP 2014)	175 (0.412) (UNDP 2014)	183 (0.374) (UNDP 2014)
People below the poverty line (%)	58% (UNFDA 2010)	64% (UNFDA 2008)	70% (UNFDA 2012)
Health expenditure, total (% of GDP)	6% (World Bank 2012)	16% (World Bank 2012)	15% (World Bank 2012)
Maternal mortality rate (per 100,000 live births)	980 (UNICEF 2012)	990 (UNICEF 2012)	1,100 (WB 2013)
Immunisation, measles (% of children aged 12–23 months)	58 (World Bank 2012)	80 (World Bank 2012)	80 (World Bank 2012)
Incidence of malaria (per 100,000 people)	38,333 (WHO 2012)	27,793 (WHO 2012)	19,027 (WHO 2012)
Average births attended by skilled health personnel	45 (WHO 2006)	61 (WHO 2006)	61 (WHO 2006)
Physicians per 10,000 people	1 (World Bank 2010)	0.1 (WHO 2006)	0.2 (WHO 2006)
Nurses and midwives per 10,000 people	0 (World Bank 2010)	2.7 (WHO 2006)	1.7 (WHO 2006)
Main causes of death in children under 5 (%)	Malaria: 27 Acute respiratory infections: 13 (WHO 2012)	Malaria: 21 Acute respiratory infections: 14 (WHO 2012)	Acute respiratory infections: 17 Diarrhoea: 14 Malaria: 14 (WHO 2012)